

81, 93 and 103) have been amended, the above amendment is, in effect, an amendment of all of the claims rejected by the Examiner. The Examiner is requested to reconsider the rejection of these claims.

I. The Amendments

Claims 81 and 93 have been amended to include from about 1000 to about 10,000 ppm of a light stabilizer in the core layer. Support for these amendments is found in the specification and in claims 90 and 100, respectively, which have now been cancelled.

Claim 103 has been amended to indicate the film is unoriented (claim 114), and to include an adhesive layer (claim 105). Claims 105 and 114 have been cancelled.

Claims 115-118 have been added. In these claims, the multilayer film is an unoriented film comprising a core, two skin layers, and a layer of pressure sensitive adhesive on the second skin layer. Support for the new claims is found in the specification and in the original claims as follows:

<u>New Claim</u>	<u>Support</u>
115	Claims 81, 86, 113
116	Claim 87
117	Claims 93 and 96, and page 4, lines 33-34
118	Claim 97

Entry of the amendments is requested.

II. Election/Restrictions

Claims 111 and 112 have been withdrawn by the Examiner from consideration as being directed to a non-elected invention since these claims are directed to an invention that was claimed by originally presented non-elected claims 39 and 40.

Accordingly, these claims have been cancelled, and Applicants reserve the right to file a divisional application directed to these claims.

III. Claim Rejections

A. Claims 81-85, 91-95, 101, 102 and 113 have been rejected under 35 USC §102(b) as being anticipated by Mueller U.S. Patent 4,532,189.

Since Applicants have amended independent claims 81 and 93 to include a light stabilizer in the core, and the remaining rejected claims are dependent from either 81 (Amended) or 93 (Amended) the above rejection of these claims is believed moot.

B. Claims 90, 100, 103, 104, 107, 108 and 114 have been rejected under 35 USC §103(a) as being unpatentable over Mueller U.S. 4,532,189 in view of Schoenberg U.S. Patent 4,643,943.

Note: claims 81-85, 91-95, 101, 102 and 113 have been amended above to specify that the core layer in the multilayer films of these claims contains from about 1000 to about 10,000 ppm of a light stabilizer. Accordingly, the discussion in this section B is submitted to apply as well to the patentability of those amended claims as well.

The Examiner acknowledges that Mueller fails to teach that the core comprises a light stabilizer at a concentration of about 1000 to about 10,000 ppm based on the weight of the core layer, that the first skin layer may comprise a light stabilizer at a concentration of about 2000 to 20,000 ppm based on the weight of the first skin layer, and the second skin layer may comprise a light stabilizer at a concentration of about 1000 to about 15,000 ppm based on the weight of the second skin layer.

Schoenberg teaches that the surface layers of a five layer thermoplastic film may include from 500 to 3000 ppm of ultraviolet stabilizers (see column 6, lines 45-63). The Examiner states "Common sense dictates that for better protection, light stabilizers may also be included into a core layer." (Communication of 5/6/03, page 5).

Accordingly, the Examiner has concluded that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included 500 to 3000 ppm of ultraviolet stabilizers into a core layer and skin layers of a thermoplastic film of Mueller with the expectation of providing the desired protection against ultraviolet light. The Examiner is respectfully requested to reconsider and withdraw this rejection.

Schoenberg describes multi-layer polyolefin shrink films which may comprise a core layer, two surface layers and two intermediate layers. (See abstract). Schoenberg teaches

that the skin or surface layers preferably contain one or more ultraviolet light stabilizers. (Column 6, lines 61-63). Schoenberg neither teaches nor suggests that the light stabilizers could be included in the core layer or the intermediate layers. Thus, one skilled in the art reading the Schoenberg patent would be led to believe that it is necessary to incorporate the light stabilizer in the surface layer which is the first layer exposed to ultraviolet light.

Applicants' amended claims 81-89, 91-102 and 114 now include a light stabilizer in the core layer. Amended claims 103-104 and 107-110 specify a light stabilizer in the core and the two skin layers. Applicants respectfully submit that such claims are not obvious to one skilled in the art from a reading of Schoenberg. The use of a light stabilizer in a core in lieu of a light stabilizer in the outer surface layers would not be obvious from the teaching of Schoenberg, and neither would the use of a light stabilizer in both the core and the surface layer be obvious from the teachings of Schoenberg. Schoenberg provides no motivation to one skilled in the art to include light stabilizers in the core layer. Common sense would suggest the stabilizer should be in the surface layer, as taught by Schoenberg, to interact with the light as soon as it contacts the film.

Applicants also respectfully submit that "common sense" is not the proper test for obviousness.

It is well established that even though the prior art can be modified, the prior art must still have some suggestion of the modification. The only suggestion for incorporating light stabilizer into the core of Applicants' multilayer film (or Mueller's film) is found in Applicants' written description and claims. The Federal Circuit has repeatedly warned that the requisite motivation must come from the prior art, not from what is taught by an applicant for a patent. The prior art relied upon by the Examiner contains no suggestion of the desirability of using a light stabilizer in the core of a multilayer film. As noted in In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984),

"the mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification."

Applicants respectfully submit that the Examiner's reliance on "common sense" suggests a rejection based on "hindsight" or "obvious to try" both of which are improper bases for a

rejection under §103. Withdrawal of the rejection of these claims is believed in order, and an early action to this effect is solicited.

C. Claims 86, 87, 96, 97 have been rejected under 35 USC §103(a) as being unpatentable over Mueller U.S. 4,532,189 in view of Tomiyama et al U.S. 5,127,974.

Rejected claims 86, 87, 96 and 97 have been amended since are dependent from amended claims 81 and 93. Thus, these claims describe a multilayer thermoplastic film which comprises, inter alia, a core layer containing from 1000 to about 10,000 ppm of a light stabilizer, and a layer of a pressure sensitive adhesive overlying the second thermoplastic skin layer. Mueller, as applied above, fails to teach two features of these rejected claims, namely, the presence of the light stabilizer in the core and the presence of a layer of pressure sensitive adhesive overlying the second skin layer.

The Examiner maintains that Mueller further teaches that the heat-shrinkable thermoplastic film may be combined with other polymeric materials for specific applications (see column 4, lines 35-40), but the Examiner acknowledges that Mueller fails to teach that for some applications a layer of a pressure sensitive article overlies the second thermoplastic skin layer and a release liner overlies the layer of pressure sensitive adhesive.

Tomiyama et al is relied upon by the Examiner for teaching that a heat-shrinkable thermoplastic film may be combined with a pressure sensitive adhesive and a release liner overlying the pressure sensitive adhesive for releasably wrapping automobiles (see column 1, lines 49-51; column 2, lines 4-9). The Examiner concludes

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added a pressure sensitive adhesive with a release liner overlying the layer of pressure sensitive adhesive to one of skin layers of a heat-shrinkable thermoplastic film of Mueller for making releasable wrapping as taught by Lin et al.* (Page 6).

* Reference to Lin et al is not understood since no Lin et al reference has been cited by the Examiner.

Reconsideration and withdrawal of this rejection is solicited. Applicants respectfully submit that there is no basis for combining the teachings of Tomiyama with Mueller. The only apparent relationship between the two teachings is that they are both involved with shrinkable plastic films. Mueller's teachings in column 4, lines 35-40 that the heat-shrinkable thermoplastic film may be combined with other polymeric materials for specific applications is very general and clearly does not suggest any specific polymeric material such as a pressure sensitive adhesive layer. Applicants respectfully submit that one skilled in the art considering both references, would not find it obvious to utilize an adhesive layer, based on Tomiyama on the films of Mueller. Mueller's films are different from those described by Tomiyama.

In any event, as mentioned above, claims 86, 87, 96 and 97 are now dependent from amended claims 83 and 93, respectively, and these claims now define a multilayer film having a core layer which contains a light stabilizer which is not disclosed in Mueller. Thus, even if the disclosures of Tomiyama and Mueller are combined as suggested by the Examiner, the combination fails to teach or suggest a multilayer film having an adhesive layer and a light stabilizer in the core layer.

D. Claims 88, 89, 98 and 99 have been rejected under 35 USC §103(a) as being unpatentable over Mueller U.S. 4,532,189 in view of Schreck et al U.S. 5,716,698.

The Examiner acknowledges that Mueller, as applied above, fails to teach that the film further comprises an opacifying layer between the core layer and the second skin layer (claims 88, 89); and the opacifying layer comprises a white pigment (claims 89, 99). Schreck et al is relied upon for their teaching that a thermoplastic packaging film can be made opaque by adding conventional opacifying pigments such as white pigments to at least one of the layers of the film.

Since claims 88, 89, 98 and 99 are dependent from amended claims 81 and 93 which now specify the presence of a light stabilizer in the core layer, and since such multilayer films are neither disclosed or suggested by the combination of Mueller and Schreck et al, the rejection should be withdrawn.

- E. Claims 105 and 106 have been rejected under 35 USC §103(a) as being unpatentable over Mueller U.S. 4,532,189 in view of Schoenberg U.S. 4,643,943, as applied above, and further in view of Tomiyama et al U.S. 5,127,974.

These claims have been cancelled.

- F. Claims 109 and 110 have been rejected under 35 USC §103(a) as being unpatentable over Mueller in view of Schoenberg, as applied above, and further in view of Schreck et al.

These claims now relate to an unoriented multilayer thermoplastic film comprising a core layer and two skin layers wherein the core layer and the two skin layers contain a light stabilizer. As presently amended, the multilayer film of claims 109 and 110 also comprises at least one layer of pressure sensitive adhesive overlying the second thermoplastic skin layer. (See amendment to claim 103).

The Examiner has acknowledged that Mueller in view of Schoenberg, as applied above, fail to teach that the film further comprises an opacifying layer between the core layer and the second skin layer (claim 110); and that the opacifying layer comprises a white pigment (claim 111). Schreck et al teach that thermoplastic packaging films can be made opaque by adding conventional opacifying pigments such as white pigments to at least one of the layers. The Examiner has relied on Schreck et al to teach that pigments can be added to a layer in a thermoplastic packaging film to make the film opaque.

Even if, for the sake of argument, it would be obvious to add pigments to an intermediate layer between the core layer and the second skin layer, based upon the teachings of Schreck et al, the combination of the three references would not render the multilayer films of claims 109 and 110 obvious because these three references do not contain any suggestion of an unoriented film containing a core layer, two skin layers, and an adhesive layer. Further detailed comment concerning the patentability of amended claims 109 and 110 is found below in IV.

IV. Additional Comments Regarding Patentability of Amended Claims 103, 104, 107-110, and new claims 115-118.

Claims 103, 104, 107-110, and new claims 115-118 specify that the claimed multilayer film is an unoriented multilayer film comprising a core layer, two skin layers, and a layer of pressure sensitive adhesive overlying the second skin layer. Amended claim 103 also specifies that the core layer and the two skin layers contain specified amounts of a light stabilizer.

In addition to the comments submitted above, Applicants respectfully submits that these claims further distinguish over the references relied upon by the Examiner. Mueller, Schoenberg, Tomiyama and Schreck et al all relate to oriented films. Although, as noted by the Examiner, Mueller initially prepares an extruded multilayer film (unoriented) as an intermediate, it is always subjected to stretching and orientation, preferably, biaxial orientation (column 7, line 24) to form the desired shrink film (see title and summary of the invention). Thus, when Mueller et al state in column 4, lines 35-40, that "the multi-layer film may be combined with other polymeric materials for specific applications," Mueller is referring to an oriented, multilayer heat-shrinkable film. Tomiyama also is concerned with oriented heat-shrinkable film, and Tomiyama's adhesive layer is applied to an oriented heat-shrinkable film. (e.g., col. 2, line 64 to col. 3, line 5). Thus, for the sake of argument, if it would be obvious to combine the teachings of Tomiyama with Mueller, one skilled in the art would add a layer of pressure sensitive adhesive to Mueller's oriented heat shrinkable film, not the intermediate coextrudate which is unoriented.

In summary, even if the disclosures of Mueller and Tomiyama can be combined as suggested by the Examiner, the resultant product would be an oriented, heat-shrinkable film having a layer of a pressure sensitive adhesive. At the very least, Applicants' claims 103, 104, 107-110 and 115-118 are patentable over any combination of the references cited by the Examiner.

CONCLUSION

The Examiner is respectfully requested to reconsider the application of the references to the claims as amended. Applicants submit that all of the claims pending in the application are allowable, and an early action to this effect is solicited.

Respectfully submitted,

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APPENDIX

Version with markings showing changes made in claims. Underlining indicates words being added, and brackets indicate words being deleted.

81. (Amended) A multilayered thermoplastic film, comprising:
- a thermoplastic core layer having a first side and a second side, the core layer comprising:
 - (a) a polyolefin having a density in the range of about 0.89 to about 0.97 grams per cubic centimeter; [and]
 - (b) from about 2% to about 25% by weight of a second polymeric material selected from ionomers derived from sodium, lithium or zinc and an ethylene/unsaturated carboxylic acid copolymer; and
 - (c) a light stabilizer at a concentration of about 1000 to about 10,000 ppm based on the weight of the core layer;
 - at least one abrasion resistant first thermoplastic skin layer overlying the first side of the core layer; and
 - at least one second thermoplastic skin layer overlying the second side of the core layer,
 - wherein the composition of the core layer is different from the composition of the skin layers, and the core layer and the skin layers are characterized by the absence of PVC.

Please amend claim 93 as follows:

93. (Amended) A multilayered thermoplastic film, comprising:
a thermoplastic core layer having a first side and a second side, the core layer comprising:
- (a) a polyolefin having a density in the range of about 0.89 to about 0.97 grams per cubic centimeter;
 - (b) from about 2% to about 10% by weight of a second polymeric material selected from ionomers derived from sodium, lithium or zinc and an ethylene/unsaturated carboxylic acid copolymer, [and]
 - (c) from about 1% to about 40% by weight of a third polymeric material selected from ethylene/vinyl acetate copolymers, acid modified ethylene/vinyl acetate copolymers, anhydride modified ethylene/vinyl acetate copolymers, acrylate modified ethylene/vinyl acetate copolymers, anhydride modified polyolefins, acid modified ethylene acrylate polymers and anhydride modified ethylene acrylate polymers; and
 - (d) a light stabilizer at a concentration of about 1000 to about 10,000 ppm based on the weight of the core layer;
- at least one abrasion resistant first thermoplastic skin layer overlying the first side of the core layer; and
- at least one second thermoplastic skin layer overlying the second side of the core layer,
- wherein the composition of the core layer is different from the composition of the skin layers, and the core layer and the skin layers are characterized by the absence of PVC.

Please amend claim 103 as follows:

103. (Amended) [A] An unoriented multilayered thermoplastic film, comprising:
a thermoplastic core layer having a first side and a second side, the core layer comprising:

(a) a polyolefin having a density in the range of about 0.89 to about 0.97 grams per cubic centimeter;

(b) from about 3% to about 10% by weight of a second polymeric material selected from ionomers derived from sodium, lithium or zinc and an ethylene/methacrylic acid copolymer,

(c) from about 1% to about 40% by weight of a third polymeric material selected from ionomers derived from sodium, lithium or zinc and an ethylene/unsaturated carboxylic acid copolymer,

(d) a light stabilizer at a concentration of about 1,000 to about 10,000 ppm based on the weight of the of core layer;

an abrasion and scuff resistant clear first thermoplastic skin layer overlying the first side of the core layer; the first skin layer comprising a light stabilizer at a concentration of about 2,000 to about 20,000 ppm based on the weight of the first skin layer;

a clear second thermoplastic skin layer overlying the second side of the core layer; the second skin layer comprising a light stabilizer at a concentration of about 1,000 to about 15,000 ppm based on the weight of the second skin layer; and

at least one layer of pressure sensitive adhesive overlying the second thermoplastic skin layer;

wherein the composition of the core layer is different from the composition of the skin layers, and the core layer and the skin layers are characterized by the absence of PVC.

Please add the following claims 115 - 120.

115. (New) An unoriented multilayered thermoplastic film, comprising:
a thermoplastic core layer having a first side and a second side, the core layer comprising:

(a) a polyolefin having a density in the range of about 0.89 to about 0.97 grams per cubic centimeter; and

(b) from about 2% to about 25% by weight of a second polymeric material selected from ionomers derived from sodium, lithium or zinc and an ethylene/unsaturated carboxylic acid copolymer;

at least one abrasion resistant first thermoplastic skin layer overlying the first side of the core layer;

at least one second thermoplastic skin layer overlying the second side of the core layer; and

at least one layer of a pressure sensitive adhesive overlying the second thermoplastic skin layer,

wherein the composition of the core layer is different from the composition of the skin layers, and the core layer and the skin layers are characterized by the absence of PVC.

116. (New) An unoriented multilayered thermoplastic film, comprising:

a thermoplastic core layer having a first side and a second side, the core layer comprising:

(a) a polyolefin having a density in the range of about 0.89 to about 0.97 grams per cubic centimeter;

(b) from about 2% to about 10% by weight of a second polymeric material selected from ionomers derived from sodium, lithium or zinc and an ethylene/unsaturated carboxylic acid copolymer, and

(c) from about 1% to about 40% by weight of a third polymeric material selected from ethylene/vinyl acetate copolymers, acid modified ethylene/vinyl acetate copolymers, anhydride modified ethylene/vinyl acetate copolymers, acrylate modified ethylene/vinyl acetate copolymers, anhydride modified polyolefins, acid modified ethylene acrylate polymers and anhydride modified ethylene acrylate polymers;

at least one abrasion resistant first thermoplastic skin layer overlying the first side of the core layer;

at least one second thermoplastic skin layer overlying the second side of the core layer; and at least one layer of pressure sensitive adhesive overlying the second skin

layer;

wherein the composition of the core layer is different from the composition of the skin layers, and the core layer and the skin layers are characterized by the absence of PVC.